

Deliverable 2: Inventory of Regulatory Framework Conditions for vRE

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Comprehensive Technical-Regulatory Advisory to enhance RE-based
share in electricity grids of Western Balkans

February 2024

Western Balkans

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1. INTRODUCTION

The regional project "Green Agenda: Decarbonization of the Electricity Sector in the Western Balkans" is funded by the German Federal Ministry for Economic Cooperation and Development and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit und Entwicklung (GIZ) GmbH over a period of 3 years, until 2025.

The project generally aims to strengthen the power sector key actors' confidence in the feasibility of an energy transition based on renewable energies.

The focus is on providing fundamental knowledge that is of equal importance for as many as possible of the Western Balkan (WB) countries by building competencies and providing up-to-date knowledge on innovative technological solutions for the electricity sector in the Western Balkans and improving the regulatory framework for increased use of renewable energy. In addition, the project aims to create a basic awareness of the need to establish appropriate education and training opportunities for a RE-based energy transition among the relevant organizations.

This report, Inventory of regulatory and framework conditions in WB countries, is deliverable of work package 2.1 – Needs assessment for improving regulatory framework conditions for renewable energy, which focuses on providing an overview of legal documents and relevant policies that impact the planning and investment security for the variable renewable energy (vRE) in each WB country.

The relevant policies are grouped according to following subjects:

- Grid code provisions for vRE integration
- Regulations and processes for vRE grid access
- Rules for private sector participation in vRE expansion (rights and obligations of vRE investors and operators)
- Market design and pricing with respect to vRE

To provide an overview of regulatory and framework conditions for vRE, the work included a desk review of project documents, consultations with key project partners through the distribution of a structured questionnaire (see Annex I), as well as additional research on the relevant policies and legislation.

The list of consulted project partners that provided valuable replies is presented in Annex II of this report.

2. ALBANIA

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	Law Nr.43/2015 On the electricity sector	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> • Law Nr.43/2015 On the electricity • Transmission Network Code / Planning Code 	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of TSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	X			
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	✓	<ul style="list-style-type: none"> • Law Nr.43/2015 On the electricity sector • Law Nr.24/2023 On the promotion of use of renewable energy sources 	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf	
European Network Code Requirements for Generators transposed into the national legislation	✓	ERE's Decision No.129/2018 issued according to Energy Community decision	https://ere.gov.al/images/archive/VENDIM_NR.129_2018_1.pdf	
DSO technical requirements for connecting vRE in place	✓	DSO Grid Code	https://ere.gov.al/doc/Distribution_Code-1.pdf	
TSO technical requirements for connecting vRE in place	✓	<ul style="list-style-type: none"> • TSO Network Code • ERE Decision No.129/2018 (Network Code Requirements for Generators) 	https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf https://ere.gov.al/images/archive/VENDIM_NR.129_2018_1.pdf	
DSO priority dispatching for vRE (wind, solar) in place	✓	• Law Nr.43/2015 On the electricity sector	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Law Nr.24/2023 On the promotion of use of renewable energy sources 	https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf	
TSO priority dispatching for vRE (wind, solar) in place	✓	<ul style="list-style-type: none"> Law Nr.43/2015 On the electricity sector Law Nr.24/2023 On the promotion of use of renewable energy sources 	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf	
Capacity mechanisms for electricity market in place	X			
Methodology for national resource adequacy assessment available	✓	TSO Network Code	https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf	
DSO rules for procurement of flexibility services from vRE plants	X			
TSO rules for procurement of flexibility services from vRE plants	✓	Balancing Market Rules	https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	
Regulatory framework for EV recharging points connection to the distribution grid	X			
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> Law Nr.43/2015 On the electricity sector DSO Grid Code 	https://www.ere.gov.al/doc/Law_on_ene_rgy_sector_approved_on_43.2015.pdf https://ere.gov.al/doc/Distribution_Code-1.pdf	
DSO procedure promoted/published on the internet	X			
TSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> TSO Network Code ERE Decision Nr.87/2018 on the Regulation on the new connection and modification of the existing transmission grid connection procedures 	https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf https://www.ere.gov.al/doc/REGULATION%20OF%20THE%20PROCEDURES%20OF%20NEW%20CONNECTIONS%20AND%20THE%20MODIFICATION%20OF%20THE%20EXISTING%20ONES%20IN%20THE%20TRANSMISSION%20SYSTEM.pdf	
TSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	<ul style="list-style-type: none"> Law No.24/2023 On the promotion of the use of renewable energy sources 	https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Instruction of ERE no.3 from 20.06.2019 for the approval of the procedure to facilitate authorization for the connection in the distribution system of small renewable self-producers of electricity from the sun 	https://www.ere.gov.al/doc/Udhezim_3_20.06.2019%20(2).pdf	
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	X			
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	✓	Law Nr.24/2023 On the promotion of use of renewable energy sources	https://www.ere.gov.al/images/files/2023/06/06/liqj_nr_24_dt_23.3.2023.pdf	
Appeal/complaint procedure in place, in case of grid connection refusal	✓	ERE Decision Nr.87/2018 on the Regulation on grid connection procedures	https://www.ere.gov.al/doc/Regulation_for_handling_the_complaints_and_settling_the_disputes.pdf	
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	X			
Guidelines for investors for the development of vRE projects published on internet	X		https://opencorporates.al/documents/dokumenta/1662215245vendim-2015-10-07-822.pdf Qeveria Shqiptare Keshilli i Ministrave (kryeministria.al)	The rules and application forms are published by the Decision VKM 822 of the Ministerial Council and published on the Ministry of Infrastructure and Energy website, however, these are not user friendly guidelines for investors that provide
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	●	The 10-Year National Development Plan for the transmission grid	https://www.ost.al/wp-content/uploads/2020/12/Programi-10-Vjecar-i-Zhvillimit-te-Transmetimit.pdf	DSO is currently working on publishing network capacities on its website
DSO point of connection definition available	✓	DSO Grid Code	https://ere.gov.al/doc/Distribution_Code-1.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
TSO point of connection definition available	✓	TSO Network Code	https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf	The point of connection to the transmission grid for power plants is the high-voltage bus bars of the vRE plant substation (high voltage side of the step-up transformer), which is also the metering point
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	<ul style="list-style-type: none"> • Law Nr.43/2015 On the electricity sector • Law Nr.24/2023 On promoting the use of energy from renewable sources • DSO Grid Code 	https://www.ere.gov.al/doc/Law_on_energy_sector_approved_on_43.2015.pdf https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf https://ere.gov.al/doc/Distribution_Code-1.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	<ul style="list-style-type: none"> • Law Nr.43/2015 On the electricity sector • Law Nr.24/2023 On promoting the use of energy from renewable sources • TSO Network Code 	https://www.ere.gov.al/doc/Law_on_energy_sector_approved_on_43.2015.pdf https://www.ere.gov.al/images/files/2023/06/06/liqi_nr_24_dt_23.3.2023.pdf https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	✓	This information is included in the 10-Year National Development Plan of the transmission grid.	https://www.ost.al/wp-content/uploads/2020/12/Programi-10-Vjecar-i-Zhvillimit-te-Transmetimit.pdf	
DSO monitors data of real-time production of vRE plants	X			
TSO monitors data of real-time production of vRE plants	X			
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	X			
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	X			
DSO Curtailment compensation schemes for vRE in place	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	DSO Grid Code	https://ere.gov.al/doc/Distribution_Code-1.pdf	
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	TSO Network Code	https://www.ere.gov.al/images/files/2023/02/24/Transmission_Code.pdf	
TSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	✓	Electricity Balancing Market Rules	https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	✓	Electricity Balancing Market Rules	https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	✓	Electricity Balancing Market Rules	https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	
Grid connection charges in place	●	ERE Decision Nr.87/2018 on the Regulation on transmission grid connection procedures	https://www.ost.al/wp-content/uploads/2021/05/P%C3%ABr-lidhjet-e-reja-ne-rrjetin-e-transmetimit-vendim-2018-04-20-87.pdf	DSO Grid connection charges not available
Charges to vRE projects specifically for network reinforcement in place	X			
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	✓	Electricity Market Rules	https://www.ere.gov.al/doc/Albanian_Electricity_Market_Rules.pdf	
Intraday wholesale market (power exchange) established	X			
Electricity retail tariffs based on average production costs	✓	Methodology for determination of retail prices for electricity supplied by universal supplier	https://www.ere.gov.al/doc/Metodologjia_FSHU.pdf	
Electricity retail tariffs based on marginal production costs	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Organized balancing market established – capacity and energy separately	X			
Organized balancing market established – capacity and energy bundled	X			
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	X			
Uniform imbalance pricing applied at balancing market	✓	Electricity Balancing Market Rules	https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	Balancing market rules are included in the Market Rules
Market arrangements for aggregators available	X			
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	X			TSO is responsible for registration of market participants
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	<ul style="list-style-type: none"> Electricity Market Rules Electricity Balancing Market Rules 	https://www.ere.gov.al/doc/Albanian_Electricity_Market_Rules.pdf https://ere.gov.al/doc/ABM_Rules_Main_Body_Final_Draft_ABM_rules.pdf	
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	✓	<ul style="list-style-type: none"> Law No.24/2023 On promoting the use of energy from renewable sources Decision of Ministry of Infrastructure and Energy (MIE) no.27 	https://www.ere.gov.al/images/files/2023/06/06/liqj_nr_24_dt_23.3.2023.pdf https://www.infrastruktura.gov.al/wp-content/uploads/2021/02/Strategjia-FiT-ne-CfD.pdf	The feed-in tariff (FIT) support available to small producers only
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	✓	<ul style="list-style-type: none"> Law No.24/2023 On promoting the use of energy from renewable sources 	https://www.ere.gov.al/images/files/2023/06/06/liqj_nr_24_dt_23.3.2023.pdf	In Albania so far three auctions resulted in PPAs signed for 15 years at the auction price
The price of vRE is determined based on Merchant/Private or Corporate PPAs	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	✓	<ul style="list-style-type: none"> • Law No.24/2023 On promoting the use of energy from renewable sources • Decision of Ministry of Infrastructure and Energy (MIE) no.27 	https://www.ere.gov.al/images/files/2023/06/06/liqi_nr._24_dt._23.3.2023.pdf https://www.infrastruktura.gov.al/wp-content/uploads/2021/02/Strategjia-FiT-ne-CfD.pdf	The CfD support available for large vRE projects
Phase of smart meters rollout	●			Planning phase
Time of use metering in place	X			

Network charges for injection into the grid

TSO charges: n/a

DSO charges: n/a

3. BOSNIA AND HERZEGOVINA

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	X			
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	✓	<ul style="list-style-type: none"> The decision about the removal of maximum amounts of grid-connected vRE 	https://www.derk.ba/DocumentsPDFs/Odluka-o-odobr-ukidanja-maks-moguće-snage-prihvata-2022-b.pdf	
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	✓	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	
TSO technical requirements for connecting vRE in place	✓	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	
TSO priority dispatching for vRE (wind, solar) in place	X			
Capacity mechanisms for electricity market in place	✓	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	
Methodology for national resource adequacy assessment available	●	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	Adequacy assessment is also done within the framework of ENTSO-E
TSO rules for procurement of flexibility services from vRE plants	X			
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
TSO grid connection procedure for vRE plants established	✓	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	
TSO procedure promoted/published on the internet	X			
Appeal/complaint procedure in place, in case of grid connection refusal	✓	SERC Connection Rules	www.derk.ba/en/derksrulesandregulations/regulationsontheconnection	DERK is responsible for resolving disputes arising from the application of Regulations on the connection (transmission and MV network)
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Guidelines for investors for the development of vRE projects publicly available	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BIH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version
Guidelines for investors for the development of vRE projects published on internet	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BIH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version; Guidelines not published on internet sites of BIH institutions
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	X			
TSO point of connection definition available	✓	Regulations on the connection	www.derk.ba/en/derksrulesandregulations/regulationsontheconnection	For vRE connected on the high and medium voltage point of connection is in substation 110/x kV
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	Tariff pricing methodology for services of electricity transmission, independent system operator and ancillary services	https://www.derk.ba/DocumentsPDFs/Metodologija_za_izradu_tarifa-precisceni_tekst_4Nov2021-en.pdf	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	●	TSO Long -Term Network Development Plan Indicative Generation Development Plan for the Period 2024 - 2033	https://www.nosbih.ba/files/2022/03/20220328-lat-Indikativni-plan-razvoja-proizvodnje-2023-2032.pdf	for DSO level not available
TSO monitors data of real-time production of vRE plants	X			
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	✓	TSO grid connection agreement		If vRE is responsible balancing party >3 MW obliged to submit a forecast one day in advance, with a time granulation of 15 minutes
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the TSO (curtailment dispatching instruction)	✓	TSO Grid Code	https://www.nosbih.ba/files/2021/12/20211220-bs-Mrezni-kodeks-NOSBiH-a.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
TSO curtailment framework based on the specified methodology for selecting the units to curtail	●	Market Rules Management Agreement	https://www.nosbih.ba/files/2021/10/20211015-hr-Trzisna-pravila-NOSBiH.pdf	
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	✓	<ul style="list-style-type: none"> Market rules Rulebook on the operation of the daily balance energy market 	https://www.nosbih.ba/files/2021/10/20211015-bs-Trzisna-pravila-NOSBiH.pdf https://www.nosbih.ba/files/2021/11/20211109-lat-Pravilnik-o-radu-dnevnog-trzista-balansne-energije.pdf	
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	✓	<ul style="list-style-type: none"> Market rules Rulebook on the operation of the daily balance energy market 	https://www.nosbih.ba/files/2021/10/20211015-bs-Trzisna-pravila-NOSBiH.pdf https://www.nosbih.ba/files/2021/11/20211109-lat-Pravilnik-o-radu-dnevnog-trzista-balansne-energije.pdf	
Grid connection charges in place	✓	Decision on Tariff for Independent System Operator	https://www.derk.ba/DocumentsPDFs/Odluka-o-tarifi-za-NOS-20-12-2023-en.pdf	
Charges to vRE projects specifically for network reinforcement in place	✓	Rulebook on Grid Connection	https://www.elprenos.ba/Prikljucak/Pravilnik_o_prikljucku_23_10_2008_final_s.pdf	
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	X			
Intraday wholesale market (power exchange) established	X			
Organized balancing market established – capacity and energy separately	✓	<ul style="list-style-type: none"> Procedures for auxiliary services Rulebook on the operation of the daily balance energy market 	https://www.nosbih.ba/files/2021/11/20211109-lat-Procedure-za-pomocne-usluge.pdf https://www.nosbih.ba/files/2021/11/20211109-lat-Pravilnik-o-radu-dnevnog-trzista-balansne-energije.pdf	
Organized balancing market established – capacity and energy bundled	X			
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	✓	<ul style="list-style-type: none"> Market Rules Rulebook on the operation of the daily balance energy market 	https://www.nosbih.ba/files/2021/10/20211015-bs-Trzisna-pravila-NOSBiH.pdf https://www.nosbih.ba/files/2021/11/20211109-lat-Pravilnik-o-radu-dnevnog-trzista-balansne-energije.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		• Procedures for Ancillary Services	https://www.nosbih.ba/files/2021/11/20211109-lat-Procedure-za-pomocne-usluge.pdf	
Uniform imbalance pricing applied at balancing market	X			
Market arrangements for aggregators available	✓	Instruction for implementation of the temporary model for access of "virtual plant" to the electricity	https://www.nosbih.ba/files/2022/10/20221018-bs-Instrukcija-za-implementaciju-privremenog-modela-pristupa-Virtuelne-elektrane-trzistu-elektricne-energije-u-BiH.pdf	
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	✓	Instructions For the Implementation of the Temporary Model of the "Virtual Power Plant" Access to the Electricity Market in BiH	https://www.nosbih.ba/files/2022/06/20220617-en-Instrukcija-za-implementaciju-privremenog-modela-pristupa-virtuelne-elektrane-trzistu-elektricne-energije-u-BiH.pdf	vRE plant or aggregator in case of stand-alone projects
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	Instructions For the Implementation of the Temporary Model of the "Virtual Power Plant" Access to the Electricity Market in BiH	https://www.nosbih.ba/files/2022/06/20220617-en-Instrukcija-za-implementaciju-privremenog-modela-pristupa-virtuelne-elektrane-trzistu-elektricne-energije-u-BiH.pdf	In case of signed PPA

FEDERATION BIH

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	•	Law on Electricity in the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	✓	Law on Energy and Regulation of Energy Activities in the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_energiji_i_regulaciji_energetskih_djelatnosti_u_FBIH_hr.pdf	
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	X			After the competent regulator (FERK) adopts new General Conditions, DSO will incorporate these provisions into the Rules on the Operation of the Distribution System.
DSO technical requirements for connecting vRE in place	●	<ul style="list-style-type: none"> EP BiH Distribution Grid Code EP HZHB Distribution Grid Code 	https://www.epbih.ba/upload/documents/Mreznna%20pravila%20distribucije_OD_S%20EP%20BiH.pdf https://www.ephzbb.ba/wp-content/uploads/mreznna_pravila_distribucije_hzbb_hr.pdf	
DSO priority dispatching for vRE (wind, solar) in place	✓	Law on Electricity in the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	
DSO rules for procurement of flexibility services from vRE plants	X			
Regulatory framework for EV recharging points connection to the distribution grid	●	Law on Electricity of the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	A legal basis has been created through the Law, while secondary legal act is required for implementation (deadline September 2024).
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	Law on Electricity of the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	
DSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	●	The Law on Renewable Energy Sources and Efficient Co-generation	https://www.ferk.ba/hr/images/stories/2023/Zakon_o_koristenju_OIEiUK_82_23_hr.pdf	A legal basis has been created through the Law, while secondary legal act is required for implementation (deadline September 2024).

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	X			
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	●	Law on Electricity of the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	Prosumers up to 23 kW entitled to simplified grid connection procedure A legal basis has been created through the Law, while update of legal acts (Rules on Connection) of EP BiH and EPHZHB is required for implementation
Grid connection procedure for energy communities in place	X			
Appeal/complaint procedure in place, in case of grid connection refusal	✓	Law on Electricity of the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	In the event that access to the distribution network is denied, a complaint can be filed with the regulatory commission (FERK) within 10 days
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BiH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version
Guidelines for investors for the development of vRE projects published on internet	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BiH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version; Guidelines not published on internet sites of BiH institutions
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	●			Study of the influence of distributed production on the distribution network of JP EPHZHB (2014) Upgrade of the study of the impact of distributed production on the distribution network of JP EP HZHB (2022) The results of the study not publicly available

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
DSO point of connection definition available	✓	Law on Electricity of the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	For vRE connected on the low voltage (0.4 kV) point of connection is a meter or substation 10/0.4 kV
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	Rulebook on the methodology for calculating connection fees and defining terms and conditions for connection to the distribution network.	https://www.ferk.ba/en/images/stories/2017/rulebook_methodology_connection_charges_connection_distribution_network_89_2014.pdf	The connection fee includes the fee for the construction of the connection, including the equipment of the measuring point and the fee for ensuring the conditions for connection through increasing the capacity of the distribution network.
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	X			
DSO monitors data of real-time production of vRE plants	●			Basic parameters only, via a "smart" meter
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	●	DSO Grid connection agreement		If vRE is responsible balancing party: >3 MW obliged to submit a forecast one day in advance; 150 kW - 3 MW obliged to submit weekly production plans;
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	X			
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	✓	The Law on Renewable Energy Sources and Efficient Co-generation	https://www.ferk.ba/hr/images/stories/2023/Zakon_o_koristenju_OIEiUK_82_23_hr.pdf	
Grid connection charges in place	✓	Rulebook on the methodology for calculating connection fees	https://www.ferk.ba/hr/images/stories/2019/izmjene_pravilnik_priključenje_hr.pdf	The connection fee amounts to 195 KM (99.4 EUR)/kW for connection to LV distribution grid, and 140 KM (71.3 EUR)/kW for connection to MV distribution grid

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Charges to vRE projects specifically for network reinforcement in place	✓	Rulebook on the methodology for calculating connection fees	https://www.ferk.ba/hr/images/stories/2019/izmjene_pravilnik_prikljucenje_hr.pdf	
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Electricity retail tariffs based on average production costs	✓	Rulebook on Tariff Methodology and Tariffs	https://www.ferk.ba/hr/images/stories/2013/tarifna_metodologija_2013_hr.pdf	
Electricity retail tariffs based on marginal production costs	X			
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	Law on Electricity in the Federation of Bosnia and Herzegovina	https://www.ferk.ba/download_zaj/2023/Zakon_o_elektricnoj_energiji_Federacije_BiH_hr.pdf	In case of signed PPA
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	X			
The price of vRE is determined based on Merchant/Private or Corporate PPAs	✓	The Law on Renewable Energy Sources and Efficient Co-generation	https://www.ferk.ba/hr/images/stories/2023/Zakon_o_koristenju_OIEiUK_82_23_hr.pdf	
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	X			
Phase of smart meters rollout	✓	<ul style="list-style-type: none"> Rulebook on metering point of Elektroprivreda BiH Rulebook on metering point of Elektroprivreda HZHB 	https://www.epbih.ba/upload/documents/dokumenti/Pravilnik_o_mjemom_mjestu_krajnjeg_kupca.pdf https://www.ephzbb.ba/wp-content/uploads/Datoteke/Pravilnik%20o%20mjemom%20mjestu%20krajnjega%20kupca.pdf	Implementation and Operational phase It is not defined by legislation, except in the case of power plants that are part of the virtual power plant
Time of use metering in place	✓	General Conditions for Supply of Electricity	https://www.ferk.ba/ba/images/stories/2023/opci_uvjeti_precisceni_tekst_bs.pdf	All customers beyond 23kW

REPUBLIKA SRPSKA

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> Law on Electricity of the RS Rulebook on encouraging the production of electricity from RES in the RS 	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf https://reers.ba/wp-content/uploads/2023/12/Pravilnik-o-podsticanju-proizvodnje-elektricne-energije-iz-obnovljivih-izvora-energije-Službeni-glasnik-RS-br.23.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	X			
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	X			After the competent regulator (RERS) adopts new General Conditions, DSO will incorporate these provisions into the Rules on the Operation of the Distribution System.
DSO technical requirements for connecting vRE in place	✓	<ul style="list-style-type: none"> Law on Electricity of the RS DSO Grid Code Rulebook on conditions for connection of power plants to distribution grid 	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf https://www.edbpale.com/wp-content/uploads/2014/05/Distributivna-mreznna-pravila.pdf https://reers.ba/wp-content/uploads/2023/12/Pravilnik-o-uslovima-priključenja-elektrana-na-ED-mrežu-RS.pdf	
DSO priority dispatching for vRE (wind, solar) in place	X			
DSO rules for procurement of flexibility services from vRE plants	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Regulatory framework for EV recharging points connection to the distribution grid	●	<ul style="list-style-type: none"> • Law on Electricity of the RS • General conditions for delivery and supply of electricity 	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf https://reers.ba/wp-content/uploads/2022/02/Op%C5%A1ti-uslovi-za-isporku-i-snabdijevanje-elektri%C4%8Dnom-energijom-Sl.-glasnik-RS-broj-13-22-.pdf	The detailed rules on connecting recharging points to the distribution grid are under development by the Regulatory Commission
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on Electricity of the RS • DSO Grid Code • Rulebook on conditions for connection of power plants to distribution grid 	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf https://www.edbpale.com/wp-content/uploads/2014/05/Distributivna_mreza_pravila.pdf https://reers.ba/wp-content/uploads/2023/12/Pravilnik-o-uslovima-prikljucenja-elektrana-na-ED-mrezu-RS.pdf	
DSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	Rulebook on prosumers	https://reers.ba/wp-content/uploads/2023/09/Pravilnik-o-kupcima-proizvodjacima-elektricne-energije.pdf	
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	X			The brochure is in the process of being prepared for publication on the websites of distribution system operators
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	✓	Rulebook on prosumers	https://reers.ba/wp-content/uploads/2023/09/Pravilnik-o-kupcima-proizvodjacima-elektricne-energije.pdf	
Grid connection procedure for energy communities in place	●	Law on Renewable Energy Sources	https://reers.ba/wp-content/uploads/2022/04/Zakon-o-obnovljivim-izvorima-energije-Sluzbeni-glasnik-RS-broj-1622.pdf	Secondary legislation – Rulebook, under preparation by the Regulatory Commission
Appeal/complaint procedure in place, in case of grid connection refusal	✓	• Law on Electricity of the RS	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> General conditions for delivery and supply of electricity 	https://reers.ba/wp-content/uploads/2022/02/Op%C5%A1ti-uslovi-za-isporku-i-snabdijevanje-elektri%C4%8Dnom-energijom-SL-glasnik-RS-broj-13-22-.pdf	
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BIH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version
Guidelines for investors for the development of vRE projects published on internet	●	USAID EPA created a document entitled: GUIDE FOR INVESTORS for BIH, 2018.	https://pdf.usaid.gov/pdf_docs/PA00W52X.pdf	Not up to date version; Guidelines not published on internet sites of BIH institutions
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	X			A 10-year study of the development of the MV distribution network in the RS contains identified critical points and limitations, as well as priority measures that need to be taken in order to eliminate the identified "bottlenecks" in the network (not publicly available)
DSO point of connection definition available	✓	Rulebook on conditions for connection of power plants to distribution grid	https://reers.ba/wp-content/uploads/2023/12/Pravilnik-o-uslovima-prikljucenja-elektrana-na-ED-mrezu-RS.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	Rulebook on conditions for connection of power plants to distribution grid	https://reers.ba/wp-content/uploads/2023/12/Pravilnik-o-uslovima-prikljucenja-elektrana-na-ED-mrezu-RS.pdf	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	●			for DSO level not available
DSO monitors data of real-time production of vRE plants	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	X			
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	X			
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	✓	<ul style="list-style-type: none"> Rulebook on prosumers 	https://reers.ba/wp-content/uploads/2023/09/Pravilnik-o-kupcima-proizvodjacima-elektricne-energije.pdf	
Grid connection charges in place	✓	<ul style="list-style-type: none"> Rulebook on methodology for determination of grid connection charge DSO Price list of non-standard services 	https://reers.ba/wp-content/uploads/2019/05/Pravilnik-Prikljucak-na-DistMrezu-sa-Obrascem-zah-tjeva-cir.pdf https://www.elektrokrajina.com/wp-content/uploads/2022/04/Cjenovnik-nestandardnih-usluga-FINAL.pdf	
Charges to vRE projects specifically for network reinforcement in place	✓	Rulebook on methodology for determination of grid connection charge	https://reers.ba/wp-content/uploads/2019/05/Pravilnik-Prikljucak-na-DistMrezu-sa-Obrascem-zah-tjeva-cir.pdf	
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Electricity retail tariffs based on average production costs	✓	Rulebook on Methodology for Determination of Electricity Prices for Public and Reserve Supply	https://reers.ba/wp-content/uploads/2021/08/Pravilnik-o-metodologiji-za-utvrđivanje-cijena-javnog-i-rezervnog-snabdijevanja-elektricne-energije-jul-2021.-godine-Službeni-glasnik-br.-7421.pdf	
Electricity retail tariffs based on marginal production costs	X			
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	Law on Electricity of the RS	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf	In case of signed PPA
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	✓			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	X			
The price of vRE is determined based on Merchant/Private or Corporate PPAs	✓			
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	X			
Phase of smart meters rollout	✓	<ul style="list-style-type: none"> • Law on Electricity of the RS • General conditions for delivery and supply of electricity 	https://reers.ba/wp-content/uploads/2021/01/Zakono-o-elektricnoj-energiji.pdf https://reers.ba/wp-content/uploads/2022/02/Op%C5%A1ti-uslovi-za-isporku-i-snabdijevanje-elektri%C4%8Dnom-energijom-Sl.-glasnik-RS-broj-13-22-.pdf	Implementation phase
Time of use metering in place	✓	Rulebook on Electricity Supply and Switching of Supplier	https://reers.ba/wp-content/uploads/2021/08/Pravilnik-o-snabdijevanju-elektricnom-energijom-i-promjeni-snabdjevaca-jul-2021.-godine-Sluzbeni-glasnik-br.-7421.pdf	

Network charges for injection into the grid

TSO charges

NOSBIH (ISO)	Energy-based	Power-based	Link to decision
	0.0037 (cent€/kWh)	n/a	https://www.derk.ba/DocumentsPDFs/Odluka-o-tarifi-za-NOS-28-12-2022-en.pdf

DSO charges: n/a

4. KOSOVO*¹

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> Law on Electricity No. 05/L – 085 Law on Energy No. 05/L – 081 	https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ang.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> Law on Electricity No. 05/L – 085 Law on Energy No. 05/L – 081 	https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ang.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	✓	Law on the Energy Regulator No. 05/L – 084 (2016)	https://ero-ks.org/2016/Liqjet/LIGJI_PER_RREGULLATORIN_E_ENERGJISE_ang.pdf	
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	✓	Grid Code - Connection Code	https://www.kostt.com/Content/ViewFiles/TechnicalCodes/KRRKK.pdf	
DSO technical requirements for connecting vRE in place	✓	<ul style="list-style-type: none"> Distribution Grid Code Rule on Prosumers of Renewable Energy Sources 	https://www.keds-energy.com/Uploads/Data/Docs/Distributioncode2020_drEq22DbFF.pdf https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/Rule%20on%20Prosumers.pdf	
TSO technical requirements for connecting vRE in place	✓	Grid Code - Connection Code	https://www.kostt.com/Content/ViewFiles/TechnicalCodes/KRRKK.pdf	

¹ This designation is without prejudice to position on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
DSO priority dispatching for vRE in place	✓	<ul style="list-style-type: none"> • Law on Electricity No. 05/L – 085 • Law on Energy No. 05/L – 081 	https://ero-ks.org/2016/Ligjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf https://ero-ks.org/2016/Ligjet/LIGJI_PER_ENERGJINE_ang.pdf	
TSO priority dispatching for vRE in place	✓	<ul style="list-style-type: none"> • Law on Electricity No. 05/L – 085 • Law on Energy No. 05/L – 081 	https://ero-ks.org/2016/Ligjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf https://ero-ks.org/2016/Ligjet/LIGJI_PER_ENERGJINE_ang.pdf	
Capacity mechanisms for electricity market in place	X			
Methodology for national resource adequacy assessment available	✓	Generation Adequacy Plan 2019 – 2028, issued by KOSTT, October, 2018	https://www.kostt.com/Content/ViewFiles/Index/EN/Generation%20Adequacy%20Report%202019-2028.pdf	
DSO rules for procurement of flexibility services from vRE plants	X			
TSO rules for procurement of flexibility services from vRE plants	X			
Regulatory framework for EV recharging points connection to the distribution grid	X			
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Distribution Grid Code • Rule on Prosumers of Renewable Energy Sources 	https://www.keds-energy.com/Uploads/Data/Docs/Distributioncode2020_drEq22DbFF.pdf https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/Rule%20on%20Prosumers.pdf	
DSO procedure promoted/published on the internet	X			
TSO grid connection procedure for vRE plants established	✓	Grid Code - Connection Code	https://www.kostt.com/Content/ViewFiles/TechnicalCodes/KRRKK.pdf	
TSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	Rule on Prosumers of Renewable Energy Sources	https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/Rule%20on%20Prosumers.pdf	
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	✓	KEDS Prosumers Information Centre	Prosumer - KEDS (keds-energy.com)	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	●	Rule on Prosumers of Renewable Energy Sources	https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Legjislacioni/Rregullat/Rule%20on%20Prosumers.pdf	Regulation on self-consumption lists simplified criteria for obtaining authorization for new RES capacities for self-consumption; draft law under preparation
Appeal/complaint procedure in place, in case of grid connection refusal	✓	Rule on Resolution of Complaints and Disputes in the Energy Sector	https://ero-ks.org/2017/Rregullat/Rule_on_Resolution_of_Complaints_and_Disputes_in_Energy_Sector.pdf	
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	✓	A-Z Guide for Renewable Energy Investment in Kosovo	https://reskosovo.rks-gov.net/wp-content/uploads/2023/05/AZ-Guide-ALB_Final.pdf	
Guidelines for investors for the development of vRE projects published on internet	✓	A-Z Guide for Renewable Energy Investment in Kosovo	https://reskosovo.rks-gov.net/wp-content/uploads/2023/05/AZ-Guide-ALB_Final.pdf	
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	●	Transmission Development Plan /KOSTT (2019) for ten year period	https://www.ero-ks.org/2019/Tregu/KOSTT_Plani%20Zhvillimor%20i%20Transmetimit%202020-2029_ver.0.1_eng.pdf	Not updated
DSO point of connection definition available	✓	Distribution Grid Code	https://www.keds-energy.com/Uploads/Data/Docs/Distributioncode2020_drEq22DbFF.pdf	
TSO point of connection definition available	✓	● Grid Code (Connection Code)	https://www.kostt.com/Content/ViewFiles/TechnicalCodes/En/GCPC.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	● Distribution Network Connection Charging Methodology and ● Distribution Grid Code	https://www.keds-energy.com/Uploads/Data/Docs/Metodologjiaetaksaveperkycje_ELCB5q3cY2.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
			https://www.keds-energy.com/Uploads/Data/Docs/Distributioncode2020_drEq22DbFF.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	<ul style="list-style-type: none"> Transmission Network Connection Charging Methodology Transmission Grid Code 	https://ero-ks.org/2018/Rregulat/Transmission_Connection_Charging_Methodology_ver_2_9_2018.pdf https://www.kostt.com/OST/TechnicalCodes	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	X			
DSO monitors data of real-time production of vRE plants	X			
TSO monitors data of real-time production of vRE plants	X			
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	X			
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	X			
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	Distribution Grid Code	https://www.keds-energy.com/Uploads/Data/Docs/Distributioncode2020_drEq22DbFF.pdf	
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the TSO (curtailment dispatching instruction)	✓	Transmission Grid Code	https://www.kostt.com/OST/TechnicalCodes	
TSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	X			
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	X			
Grid connection charges in place	✓	<ul style="list-style-type: none"> Principles on Determination of Transmission Use of System Tariffs and Market (TUOS) and Connection Taxes; Methodology on Determination of Transmission Use of System Tariffs (TUOS); Methodology on Determination of System Operator Tariffs; 	https://ero-ks.org/2017/Rregullat/TSO_Principles.pdf https://www.kostt.com/Content/ViewFiles/TransmissionAndConnection/DT_KO_006_Methodology_on_Determination_of_System_Operator_Tariffs_SO_ver2_0_Eng.pdf https://www.kostt.com/Content/ViewFiles/TransmissionAndConnection/DT_KO_006_Methodology_on_Determination_of_System_Operator_Tariffs_SO_ver2_0_Eng.pdf	
Charges to vRE projects specifically for network reinforcement in place	X			
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	X			Expected to become operational in early 2024
Intraday wholesale market (power exchange) established	X			
Electricity retail tariffs based on average production costs	✓	Rule on Regulated Generator Pricing	https://ero-ks.org/Rregullat/Rregullat_2011/English/Generation_Pricing_Rule.pdf	
Electricity retail tariffs based on marginal production costs	X			
Organized balancing market established – capacity and energy separately	X			
Organized balancing market established – capacity and energy bundled	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	X			
Uniform imbalance pricing applied at balancing market	✓	Market Rules	https://www.kostt.com/Content/ViewFiles/MarketOperatorOfKosovoEnergy/The%20Market%20Rules_3.1.pdf	
Market arrangements for aggregators available	X			
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	X			
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	Market Rules	https://www.kostt.com/Content/ViewFiles/MarketOperatorOfKosovoEnergy/The%20Market%20Rules_3.1.pdf	
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	✓	• Law on Energy No. 05/L – 081	https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ang.pdf	
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	X			
The price of vRE is determined based on Merchant/Private or Corporate PPAs	X			
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	X			
Phase of smart meters rollout	✓	<ul style="list-style-type: none"> • Law on electricity • Metering Code 	https://ero-ks.org/2016/Liqjet/LIGJI_PER_ENERGJINE_ELEKTRIKE_ang.pdf https://kostt.com/Content/ViewFiles/TechnicalCodes/En/Metering_Code_ver_13.pdf	Implementation phase
Time of use metering in place	X			

Network charges for injection into the grid

TSO charges

KOSTT	T-connected generation		D-connected generation		Link to decision
	System Operation charge (Energy based, €/MWh)	Market Operation charge (Energy based, €/MWh)	System Operation charge (Energy based, €/MWh)	Market Operation charge (Energy based, €/MWh)	https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Vendimet/Vendimet%202023/V_1712_2023_Decision%20for%20Tariffs_2023_FINAL_TSO_MO.pdf
	1.965	0.025	0.104	0.025	

DSO charges: n/a

5. MONTENEGRO

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22)	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	●	Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22)	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	X			.
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	✓	Ordinance for connection of electricity generators to transmission and distribution grid (Official Gazette 043/19)	https://www.gov.me/dokumenta/2cc5f901-a745-4096-b193-97182a2e440d	
DSO technical requirements for connecting vRE in place	✓	Rules for functioning of the distribution system (Official Gazette 72/22)	https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	
TSO technical requirements for connecting vRE in place	✓	Rules for functioning of the electricity transmission system	https://cges.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije	
DSO priority dispatching for vRE (wind, solar) in place	✓	Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22)	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf	
TSO priority dispatching for vRE (wind, solar) in place	✓	Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22)	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Capacity mechanisms for electricity market in place	X			
Methodology for national resource adequacy assessment available	X			
DSO rules for procurement of flexibility services from vRE plants	X			
TSO rules for procurement of flexibility services from vRE plants	X			
Regulatory framework for EV recharging points connection to the distribution grid	X			
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22) • Rules for functioning of the distribution system (Official Gazette 72/22) 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmjenama.pdf https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	
DSO procedure promoted/published on the internet	●	Technical requirements for small power plants up to 30 kVA	https://cedis.me/wp-content/uploads/2021/09/Tehni%C4%8Dki-zahtjevi-br.-10-10-28948-od-13.09.2021..pdf	For small vRE plants only, up to 30 kW
TSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22) • Rules for functioning of the electricity transmission system 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmjenama.pdf https://cgis.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije	
TSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	Rules for functioning of the distribution system (Official Gazette 72/22)		
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	✓	<ul style="list-style-type: none"> • Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22) 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmjenama.pdf https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Rules for functioning of the distribution system (Official Gazette 72/22) 	funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	✓	Technical requirements for small power plants up to 30 kVA	https://cedis.me/wp-content/uploads/2021/09/Tehni%C4%8Dki-zahtjevi-br.-10-10-28948-od-13.09.2021..pdf	
Appeal/complaint procedure in place, in case of grid connection refusal	✓	Rules for functioning of the distribution system (Official Gazette 72/22)	https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	●	Connection to the distribution system	https://cedis.me/prikljucenje-na-distributivni-sistem/	For DSO level only
Guidelines for investors for the development of vRE projects published on internet	●	Connection to the distribution system	https://cedis.me/prikljucenje-na-distributivni-sistem/	For DSO level only
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	●	Development plan for transmission system 2020-2029	https://cges.me/regulativa/razvoj-sistema?download=522:predlog-azuriranog-plana-razvoja-prenosnog-sistema-2020-2029	For TSO level only, not up to date
DSO point of connection definition available	✓	<ul style="list-style-type: none"> Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22) Rules for functioning of the distribution system (Official Gazette 72/22) 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmjenamea.pdf https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crme-Gore-broj-72-22.pdf	Exit point at the required voltage (defined by the contract for the construction of the connection infrastructure)
TSO point of connection definition available	✓	<ul style="list-style-type: none"> Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22) 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmjenamea.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Rules for functioning of the electricity transmission system 	https://cgas.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije	
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	<ul style="list-style-type: none"> Rules for functioning of the distribution system Methodology for determining the fee for connection to the electricity distribution system Decision on determining the fee for connection to the electricity distribution system Methodology for determining the regulatory permitted income and prices for the use of the distribution system of electricity 	https://cedis.me/wp-content/uploads/2022/08/Pravila-za-funkcionisanje-distributivnog-sistema-elektricne-energije-SI.list-Crne-Gore-broj-72-22.pdf https://cedis.me/wp-content/uploads/2022/08/Metodologija-za-utvrđivanje-naknade-za-priključenje-na-distributivni-sistem-elektricne-energije.pdf https://cedis.me/wp-content/uploads/2022/12/20221205_Odluka-o-određivanju-naknade-za-priključenje-na-distributivni-sistem-elektricne-energije-i-utvrđivanje-visine-naknade-za-priključenje.pdf https://cedis.me/wp-content/uploads/2022/07/Metodologija-za-utvrđivanje-regulatorno-dozvoljenog-prihoda-i-cijena-za-korišćenje-distributivnog-sistema-električnog-dne-energije-SI.-71-22.pdf	DSO bears the costs of building the infrastructure for connecting users to DS, while the user bears the costs of internal installation
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	<ul style="list-style-type: none"> Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22), Rules for functioning of the electricity transmission system Methodology for determination of the charges for connection to the electricity transmission system 	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf https://cgas.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije https://regagen.co.me/publikacije/cgas-metodologija-za-rdp-precisceni-tekst/ https://regagen.co.me/elektricna-energija/propisi/akta-na-koje-daje-saglasnost/odluka-o-određivanju-naknade-za-priključenje-na-distributivni-	The investor pays the fee for connection to the transmission system. In the mentioned contract, the investor has the option to decide that TSO builds the connection infrastructure or that he builds it himself. In the event that the investor decides to build the connection infrastructure, it is purchased by OPS, while the internal installations remain the property of the investor.

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Decision on determining the fee for connection to the electricity transmission system 	sistem-elektricne-energije-i-utvrđivanje-visine-naknade-za-priključenje/	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	X			
DSO monitors data of real-time production of vRE plants	X			Only historical data
TSO monitors data of real-time production of vRE plants	✓	Rules for functioning of the electricity transmission system	https://cges.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije	
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	✓	Market Rules	https://regagen.co.me/publikacije/trzisa-pravila/	Obligated to submit their schedules resulting from concluded contracts to the Market Operator and TSO (hourly data for day-ahead)
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	✓	<ul style="list-style-type: none"> Rules for functioning of the electricity transmission system, Market rules 	https://cges.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije https://regagen.co.me/publikacije/trzisa-pravila/	Hourly data for day-ahead
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	X			
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	<ul style="list-style-type: none"> Rules for functioning of the electricity transmission system, Market rules 	https://cges.me/regulativa/podzakonski-akti?download=617:pravila-za-funkcionisanje-prenosnog-sistema-elektricne-energije https://regagen.co.me/publikacije/trzisa-pravila/	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
TSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	X			
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	X			
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	X			
Grid connection charges in place	✓	<ul style="list-style-type: none"> Methodology for determining the fee for connection to the electricity transmission system, Decision on determining unit fees for connection to the electricity transmission system Methodology for determining the fee for connection to the distribution system of electricity, Decision on determining the fee for connection to the distribution system of electricity and determining the amount of the fee for connection 	https://regagen.co.me/publikacije/cges-metodologija-za-rdp-precisceni-tekst/ https://regagen.co.me/elektricna-energija/propisi/akta-na-koje-daje-saglasnost/odluka-o-odredjivanju-naknade-za-prikljucenje-na-distributivni-sistem-elektricne-energije-i-utvrđivanje-visine-naknade-za-prikljucenje/ https://cedis.me/wp-content/uploads/2022/08/Metodologija-za-utvrđivanje-naknade-za-prikljucenje-na-distributivni-sistem-elektricne-energije.pdf https://cedis.me/wp-content/uploads/2022/12/20221205_Odluka-o-odredjivanju-naknade-za-prikljucenje-na-distributivni-sistem-elektricne-energije-i-utvrđivanje-visine-naknade-za-prikljucenje.pdf	
Charges to vRE projects specifically for network reinforcement in place	X			
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	✓	Law on Energy (Official Gazette. 005/16, 051/17, 082/20, 029/22, and 152/22)	https://cedis.me/wp-content/uploads/2023/02/Zakon-o-energetici-sa-novim-izmenama.pdf	
Intraday wholesale market (power exchange) established	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Electricity retail tariffs based on average production costs	✓			
Electricity retail tariffs based on marginal production costs	X			
Organized balancing market established – capacity and energy separately	✓			
Organized balancing market established – capacity and energy bundled	X			
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	✓	Rules for the operation of balancing electricity market	https://regagen.co.me/publikacije/pravila-za-rad-balansnog-trzista-elektricne-energije/	
Uniform imbalance pricing applied at balancing market	X			
Market arrangements for aggregators available	X			
Market arrangements for energy storage available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	✓			Aggregator or Market Operator for generators under the feed-in scheme
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	✓			
The price of vRE is determined based on Merchant/Private or Corporate PPAs	✓			
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	✓			
Phase of smart meters rollout	X			No planning

Network charges

TSO charges

Injection	Energy-based (€/kWh)	Power-based (€/kWh)	Link to decision
	2.4636	213.8034	https://regagen.co.me/wp-content/uploads/2021/12/20191202_CGES_Odluka_RDP_2020-2022.pdf https://regagen.co.me/wp-content/uploads/2022/01/20211202_CGES_Odluka_o_korekcijama_KONACNA.pdf

DSO charges

Injection	Consumer category	Energy-based (EUR/kWh)	Link to decision
	35 kV	0.737	https://regagen.co.me/elektricna-energija/regulacija-cijena/operator-distributivnog-sistema/odluke-operator-distributivnog-sistema/odluke-o-utvrđivanju-privremenih-cijena-za-koriscenje-distributivnog-sistema-elektricne-energije/ https://regagen.co.me/wp-content/uploads/2022/01/20211202_CGES_Odluka_o_korekcijama_KONACNA.pdf
	10 kV	0	
	0.4 kV	0	

6. NORTH MACEDONIA

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> • Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) • Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.erc.org.mk/odluki/2019.07.19%20Mrezhni_pravila_za_distribucija_na_EE_PS.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	●	<ul style="list-style-type: none"> • Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) • Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.mepso.com.mk/docs/pravila/Mrezhni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	X			
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	●	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mrezhni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	Only for TSO level, and generators > 10 MW
DSO technical requirements for connecting vRE in place	✓	Electricity Distribution Grid Code(Official Gazette 191/2019 and 101/2022)	https://www.erc.org.mk/odluki/2019.07.19%20Mrezhni_pravila_za_distribucija_na_EE_PS.pdf	
TSO technical requirements for connecting vRE in place	✓	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mrezhni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
DSO priority dispatching for vRE (wind, solar) in place	✓	Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022)	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf	
TSO priority dispatching for vRE (wind, solar) in place	✓	Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022)	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Capacity mechanisms for electricity market in place	X			
Methodology for national resource adequacy assessment available	✓	<ul style="list-style-type: none"> • Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) • Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.mepso.com.mk/docs/pravila/Mreznici%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
DSO rules for procurement of flexibility services from vRE plants	X			
TSO rules for procurement of flexibility services from vRE plants	X			
Regulatory framework for EV recharging points connection to the distribution grid	✓	Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022)	https://www.erc.org.mk/odluki/2019.07.19%20Mreznici_pravila_za_distribuciju_na_EE_PS.pdf	
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) • Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.erc.org.mk/odluki/2019.07.19%20Mreznici_pravila_za_distribuciju_na_EE_PS.pdf	
DSO procedure promoted/published on the internet	X			
TSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) • Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.mepso.com.mk/docs/pravila/Mreznici%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
TSO procedure promoted/published on the internet	X			
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	<ul style="list-style-type: none"> • Amendments to the Law on Energy • Rulebook on Renewable Energy Sources 	https://economy.gov.mk/content/documents/Zakoni/ZAKON%20ZA%20IZMENUVANJE%20I%20DOPOLNUVANJE%20NA%20ZAKON%20ZA%20ENERGETIKA.pdf https://economy.gov.mk/Upload/Documents/draft_Pravilnik_OIE_30.10.18-converted.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) 	https://www.erc.org.mk/odluki/2019.07.19%20Mrezhni_pravila_za_distribucija_na_EE_PS.pdf	
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	X			
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	✓	<ul style="list-style-type: none"> Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) Rulebook on renewable energy sources (Official Gazette 112/19, 240/19 and 138/2022) 	https://www.erc.org.mk/odluki/2019.07.19%20Mrezhni_pravila_za_distribucija_na_EE_PS.pdf https://economy.gov.mk/Upload/Documents/draft_Pravilnik_OIE_30.10.18-converted.pdf https://www.economy.gov.mk/content/downloads/documents/izmeni%20i%20dopolnuvanje_Pravilnik%20za%20OIE%20final%2015.06.2022.pdf	
Appeal/complaint procedure in place, in case of grid connection refusal	✓	<ul style="list-style-type: none"> Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.economy.gov.mk/Upload/Documents/Zakon%20za%20energetika%20MK.pdf https://www.erc.org.mk/odluki/2019.07.19%20Mrezhni_pravila_za_distribucija_na_EE_PS.pdf https://www.mepso.com.mk/docs/pravila/Mrejni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	X			
Guidelines for investors for the development of vRE projects published on internet	X			
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	X			
Assessment of grid capacity (limits) at different locations within the existing grid including the	X			DSO software only

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available				
DSO point of connection definition available	✓	Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022)	https://www.erc.org.mk/odluki/2019.07.19%20Mreznih_pravila_za_distribuciju_na_EE_PS.pdf	
TSO point of connection definition available	✓	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mreznih%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022)	https://www.erc.org.mk/odluki/2019.07.19%20Mreznih_pravila_za_distribuciju_na_EE_PS.pdf	vRE investor pays for the new connection - vRE is charged with the real costs for the new constructed infrastructure per the capacity used by the vRE
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mreznih%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	X			
DSO monitors data of real-time production of vRE plants	X			
TSO monitors data of real-time production of vRE plants	X			
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	X			
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	✓	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mreznih%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	Exchange of planning data (active power, available reserve and restrictions) – day in advance and during the day. Real-time data exchange (switching state, active and reactive power, current, voltage and frequency at the connection point) – through appropriate SCADA systems.
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
discretion of the DSO (curtailment dispatching instruction)				
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	Electricity Transmission Grid Code (Official Gazette 4/2022)	https://www.mepso.com.mk/docs/pravila/Mrezni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
TSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	X			
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	X			
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	X			
Grid connection charges in place	✓	<ul style="list-style-type: none"> Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.erc.org.mk/odluki/2019.07.19%20Mreznih_pravila_za_distribuciju_na_EE_PS.pdf https://www.mepso.com.mk/docs/pravila/Mrezni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	Real costs for grid connection. Cost per kW for the existing grid is not charged to vRE
Charges to vRE projects specifically for network reinforcement in place	✓	<ul style="list-style-type: none"> Electricity Distribution Grid Code (Official Gazette 191/2019 and 101/2022) Electricity Transmission Grid Code (Official Gazette 4/2022) 	https://www.erc.org.mk/odluki/2019.07.19%20Mreznih_pravila_za_distribuciju_na_EE_PS.pdf https://www.mepso.com.mk/docs/pravila/Mrezni%20Pravila_prenos%20na%20EE%202022%20SI%20Vesnik.pdf	
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	✓	<ul style="list-style-type: none"> Law on energy (Official Gazette 96/2018, 96/2019 and 236/2022) 	https://www.economy.gov.mk/Upload/Dokumenti/Zakon%20za%20energetiku%20MK.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
		<ul style="list-style-type: none"> Rules for the operation of the organized electricity market 	https://www.memo.mk/wp-content/uploads/2023/04/1-%D0%9E%D0%BF%D1%88%D1%82%D0%B8-%D0%BF%D1%80%D0%B0%D0%B2%D0%B8%D0%BB%D0%B0-%D0%B7%D0%B0-%D1%80%D0%B0%D0%B1%D0%BE%D1%82%D0%B0-%D0%BD%D0%B0-%D0%BE%D1%80%D0%B3%D0%B0%D0%BD%D0%B8%D0%B7%D0%B8%D1%80%D0%B0%D0%BD%D0%B8%D0%BE%D1%82-%D0%BF%D0%B0%D0%B7%D0%B0%D1%80-%D0%BD%D0%B0-%D0%B5%D0%BB%D0%B5%D0%BA%D1%82%D1%80%D0%B8%D1%87%D0%BD%D0%B0-%D0%B5%D0%BD%D0%B5%D1%80%D0%B3%D0%B8%D1%98%D0%B0-MK.pdf	
Intraday wholesale market (power exchange) established	X			
Electricity retail tariffs based on average production costs	✓			Cost based methodology
Electricity retail tariffs based on marginal production costs	X			
Organized balancing market established – capacity and energy separately	✓	Rules for balancing of electricity (Official Gazette 179/19, 242/19, 49/20, 7/21, 146/21, 289/21, 281/22 and 114/2023)	https://www.mepso.com.mk/docs/pbee/Pravila%20za%20balansiranje%20-%20precisten%20teskt.pdf	Capacity and energy separately
Organized balancing market established – capacity and energy bundled	X			
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	✓	Rules for balancing of electricity (Official Gazette 179/19, 242/19, 49/20, 7/21, 146/21, 289/21, 281/22 and 114/2023)	https://www.mepso.com.mk/docs/pbee/Pravila%20za%20balansiranje%20-%20precisten%20teskt.pdf	
Uniform imbalance pricing applied at balancing market	X			
Market arrangements for aggregators available	X			
Market arrangements for energy storage available	X			

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	✓			Virtual Producer or Market Operator for feed-in producers
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	✓			
The price of vRE is determined based on Merchant/Private or Corporate PPAs	✓			
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	✓			
Phase of smart meters rollout	X			No planning

Network charges for injection into the grid

TSO charges: n/a

DSO charges: n/a

7. SERBIA

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
GRID CODE PROVISIONS FOR vRE INTEGRATION				
Specific DSO legal obligation to create favourable conditions for high penetration of vRE	●	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific TSO legal obligation to create favourable conditions for high penetration of vRE	●	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	Although the Law prescribes priority access to the grid for vRE, there is no specific obligation of DSO to plan/invest to create favourable conditions for high penetration of vRE
Specific NRA legal obligation to create favourable conditions for high penetration of vRE	X			
Regulatory incentives for DSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
Regulatory incentives for TSO to reinforce the electricity grid to accommodate a large share of renewable generation	X			
European Network Code Requirements for Generators transposed into the national legislation	✓	Regulation on network rules related to the connection to the network of production units	https://aers.rs/FILES/PodzakonskiAkti/2022-09-03%20sl.gl_95-22-uredba_o_mreznim_pravilima_koja_se_odnose_na%20(1).pdf	
DSO technical requirements for connecting vRE in place	✓	<ul style="list-style-type: none"> Regulation on network rules related to the connection to the network of production units Distribution Grid Code 	https://aers.rs/FILES/PodzakonskiAkti/2022-09-03%20sl.gl_95-22-uredba_o_mreznim_pravilima_koja_se_odnose_na%20(1).pdf https://elektroistribucija.rs/usluge/dokumentacija/Pravila_o_Radu_20072017.pdf	
TSO technical requirements for connecting vRE in place	✓	<ul style="list-style-type: none"> Regulation on network rules related to the connection to the network of production units Transmission Grid Code 	https://aers.rs/FILES/PodzakonskiAkti/2022-09-03%20sl.gl_95-22-uredba_o_mreznim_pravilima_koja_se_odnose_na%20(1).pdf https://ems.rs/wp-content/uploads/2023/11/Pravila-o-	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
			radu-prenosnog-sistema-07.11.2023-1.pdf	
DSO priority dispatching for vRE (wind, solar) in place	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
TSO priority dispatching for vRE (wind, solar) in place	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
Capacity mechanisms for electricity market in place	✓	Rules for the distribution of cross-border transmission capacities	https://www.aers.rs/Files/AktiAERS/AERSDajeSaglasnost/2015-10-29_Pravila%20za%20raspodelu%20prekogranicnih%20prenosnih%20kapaciteta%20(50%20procenata).pdf	
Methodology for national resource adequacy assessment available	✓	<ul style="list-style-type: none"> • Law on the use of renewable energy sources • Transmission Grid Code • 10-year transmission network development plan 	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html https://ems.rs/wp-content/uploads/2023/11/Pravila-o-radu-prenosnog-sistema-07.11.2023-1.pdf https://ems.rs/wp-content/uploads/2022/07/Plan-razvoja-prenosnog-sistema-2.pdf	
DSO rules for procurement of flexibility services from vRE plants	X			
TSO rules for procurement of flexibility services from vRE plants	✓	Rules on the operation of the electricity market	https://ems.rs/wp-content/uploads/2022/12/Pravila-o-radu-trzista-elektrcn-1.pdf	
Regulatory framework for EV recharging points connection to the distribution grid	●	<ul style="list-style-type: none"> • Law on Energy • Law on Planning and Construction 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://www.paragraf.rs/propisi/zakon_o_planiranju_i_izgradnji.html	Implementing secondary legislation has not yet been adopted
REGULATIONS AND PROCESSES FOR vRE GRID ACCESS				
DSO grid connection procedure for vRE plants established	✓	<ul style="list-style-type: none"> • Law on Energy • Law on Planning and Construction • Distribution Grid Code 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://www.paragraf.rs/propisi/zakon_o_planiranju_i_izgradnji.html https://elektroistribucija.rs/usluge/dokumentacija/Pravila_o_Radu_20072017.pdf	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
DSO procedure promoted/published on the internet	✓		https://elektroistribucija.rs/usluge/postu-pak-prikljucenja-na-dsee/postupak-prikljucenja-proizvodjaca-el-energije	
TSO grid connection procedure for vRE plants established	✓	Procedure for connecting facilities to the transmission system and part of the distribution system managed by the transmission system operator	https://ems.rs/wp-content/uploads/2023/11/Pravila-za-prikljucenje-objekata-na-prenosni-sistem-07.11.2023.pdf	
TSO procedure promoted/published on the internet	✓		https://ems.rs/prikljucenje-na-prenosni-sistem/?_rstr_nocache=pismo544654e1d15c4db8	
DSO grid connection procedure for self-consumption (prosumers) from vRE plants established	✓	Regulation on criteria, conditions and manner of calculation of receivables and liabilities between prosumers and suppliers	https://www.pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/vlada/uredba/2021/83/1/reg	
DSO procedure for self-consumption (prosumer) connection promoted/published on the internet	✓		https://elektroistribucija.rs/usluge/postu-pak-prikljucenja-na-dsee/postupak-sticanja-statusa-kupca-proizvodjaca/domacinstva_sa_direktnim_merenjem	
Simplified grid connection procedure for self-consumption (prosumers) with installed capacity up to 10.8 kW in place	✓	Regulation on criteria, conditions and manner of calculation of receivables and liabilities between prosumers and suppliers	https://www.pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/vlada/uredba/2021/83/1/reg	
DSO grid connection procedure for renewable energy communities who wish to generate electricity from vRE for self-consumption in place	X			
Appeal/complaint procedure in place, in case of grid connection refusal	X			
RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)				
Guidelines for investors for the development of vRE projects publicly available	●	Guide for Investors	https://www.undp.org/sr/serbia/publications/vodi%C4%8D-za-investitore-o-izvorima-obnovljive-energije-u-srbiji	Not up-to-date
Guidelines for investors for the development of vRE projects published on internet	●		https://www.undp.org/sr/serbia/publications/vodi%C4%8D-za-investitore-o-izvorima-obnovljive-energije-u-srbiji	Not up-to-date and not available on the websites of relevant stakeholders
Requirement for vRE plant in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years	✓	Procedure for connecting facilities to the transmission system and part of the distribution system managed by the transmission system operator	https://ems.rs/wp-content/uploads/2023/11/Pravila-za-prikljucenje-objekata-na-prenosni-sistem-07.11.2023.pdf	As part of the data that needs to be submitted for the preparation of the Connection Study, the assessment of the production on an hourly basis for

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
				a period of at least three years is required
Assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks available	X			
DSO point of connection definition available	✓	<ul style="list-style-type: none"> • Law on energy • Distribution Grid Code 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://elektrodistribucija.rs/usluge/dokumenta/Pravila_o_Radu_20072017.pdf	
TSO point of connection definition available	✓	<ul style="list-style-type: none"> • Law on energy • Transmission Grid Code • Procedure for connecting facilities to the transmission system and part of the distribution system managed by the transmission system operator 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://ems.rs/wp-content/uploads/2023/11/Pravila-o-radu-prenosnog-sistema-07.11.2023-1.pdf https://ems.rs/wp-content/uploads/2023/11/Pravila-za-prikljucenje-objekata-na-prenosni-sistem-07.11.2023.pdf	
Costs for grid infrastructure are distributed between the vRE investor and the DSO	✓	Methodology for determination of costs of connection to electricity transmission and distribution grid	https://www.aers.rs/FILES/Metodologije/2015-12-18_Metodologija%20za%20prikljucenje-elektricna%20energija-Finalno.pdf	All costs are borne by the investor
Costs for grid infrastructure are distributed between the vRE investor and the TSO	✓	Methodology for determination of costs of connection to electricity transmission and distribution grid	https://www.aers.rs/FILES/Metodologije/2015-12-18_Metodologija%20za%20prikljucenje-elektricna%20energija-Finalno.pdf	The TSO is the investor in the construction of the connection and the missing infrastructure and, at the expense of the investor
Information on locations with strong growth of demand and information on existing power generation and committed generation projects for the next 10 - 20 years available to vRE investors	●	10-year transmission network development plan	https://ems.rs/wp-content/uploads/2023/02/Plan-razvoja-prenosnog-sistema-2.pdf	
DSO monitors data of real-time production of vRE plants	X			
TSO monitors data of real-time production of vRE plants	✓	Transmission Grid Code	https://ems.rs/wp-content/uploads/2023/11/Pravila-o-	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
			radu-prenosnog-sistema-07.11.2023-1.pdf	
The obligation of vRE operators to submit generation forecasts to DSO (for which period)	✓	Law on energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	Data on the planned hourly production for the next month by the 15th day of the current month
The obligation of vRE operators to submit generation forecasts to TSO (for which period)	✓	<ul style="list-style-type: none"> • Law on Energy • Transmission Grid Code 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://ems.rs/wp-content/uploads/2023/11/Pravila-o-radu-prenosnog-sistema-07.11.2023-1.pdf	Data on the planned hourly production for the next month by the 15th day of the current month; Annual work plan, daily work plan, as well as intraday changes
DSO Curtailment compensation schemes for vRE in place	X			
DSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	X			
DSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
TSO Curtailment compensation schemes for vRE in place	X			
TSO curtailment framework based on the discretion of the DSO (curtailment dispatching instruction)	✓	<ul style="list-style-type: none"> • Law on Energy • Transmission Grid Code 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://ems.rs/wp-content/uploads/2023/11/Pravila-o-radu-prenosnog-sistema-07.11.2023-1.pdf	
TSO curtailment framework based on the specified methodology for selecting the units to curtail	X			
Legal framework for balancing requirements for vRE for small producers (prosumers/active customers) in place	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
Legal framework for balancing requirements for vRE for projects that were successful at auctions in place	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
Legal framework for balancing requirements for vRE for stand-alone projects (PPA/merchant projects) in place	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
Grid connection charges in place	✓	<ul style="list-style-type: none"> Regulation on conditions for delivery and supply of electricity Methodology for determining the costs of connection to the electricity transmission and distribution system 	https://www.paragraf.rs/propisi/uredba_o_uslovima_iskoruke_i_snabdevanja_elektricnom_energijom.html https://www.aers.rs/FILES/Metodologije/2015-12-18_Metodologija%20za%20prikljucenje-elektricna%20energija-Finalno.pdf	
Charges to vRE projects specifically for network reinforcement in place	✓	<ul style="list-style-type: none"> Law on Energy Methodology for determining the costs connected to the transmission and distribution system 	https://www.paragraf.rs/propisi/zakon_o_energetici.html https://www.aers.rs/FILES/Metodologije/2015-12-18_Metodologija%20za%20prikljucenje-elektricna%20energija-Finalno.pdf	
MARKET DESIGN AND PRICING WITH RESPECT TO vRE				
Day-ahead wholesale market (power exchange) established	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	
Intraday wholesale market (power exchange) established	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	
Electricity retail tariffs based on average production costs	✓	Methodology on determining the price of electricity for guaranteed supply	https://aers.rs/FILES/Metodologije/2014-08-08_Metodologija%20javno%20snabdevanje%20EE%20SG%2084-14.pdf	
Electricity retail tariffs based on marginal production costs	X			
Organized balancing market established – capacity and energy separately	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	
Organized balancing market established – capacity and energy bundled	X			
Dual imbalance pricing applied at balancing market (separate charge per direction upward and direction downward)	✓	Rules on the operation of the electricity market	https://ems.rs/wp-content/uploads/2022/12/Pravila-o-radu-trzista-elektrcn-1.pdf	
Uniform imbalance pricing applied at balancing market	X			
Market arrangements for energy storage available	✓	Rules on the operation of the electricity market	https://ems.rs/wp-content/uploads/2022/12/Pravila-o-radu-trzista-elektrcn-1.pdf	The TSO procures auxiliary services in accordance with the contracts on the provision of auxiliary services concluded with electricity producers,

LEGAL AND REGULATORY FRAMEWORK COMPONENT	Yes (✓) No (X) Partially (●)	LEGAL DOCUMENT	LEGAL DOCUMENT - WEBSITE / OFFICIAL JOURNAL NO	NOTE
				electricity storage facilities, end customers and aggregators
Market arrangements for aggregators available	X			
Market arrangements for demand response available	X			
Market arrangements for flexibility services available	X			
vRE plant is the responsible party for market participation	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	
System operator (TSO/DSO) or aggregator are responsible party for market participation on behalf of vRE plant	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	Based on the signed contract with vRE plant
The price of vRE is determined based on PPA with Governmental Entity/TSO – fixed price by law	✓			For feed-in tariff scheme
The price of vRE is determined based on PPA with Governmental Entity/TSO – variable price by law	X			
The price of vRE is determined based on PPA with Governmental Entity/TSO – auction price	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
The price of vRE is determined based on Merchant/Private or Corporate PPAs	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
The price of vRE is determined based on wholesale spot market participation/ CfD arrangements	✓	Law on the Use of Renewable Energy Sources	https://www.paragraf.rs/propisi/zakon-o-koriscenju-obnovljivih-izvora-energije.html	
Phase of smart meters rollout	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	Implementation phase
Time of use metering in place	✓	Law on Energy	https://www.paragraf.rs/propisi/zakon_o_energetici.html	

Network charges for injection into the grid

TSO charges: n/a

DSO charges: n/a

8. ANNEX I – QUESTIONNAIRE FOR REGULATORY FRAMEWORK CONDITIONS FOR VARIABLE RENEWABLE ENERGY

Thank you for participating in our questionnaire!

The questionnaire aims to collect data on national legislation related to variable renewable energy (vRE) in Western Balkan countries to prepare an Inventory of regulatory and framework conditions that will be presented in our next workshop.

We value your input and appreciate the time you invest in providing us with your responses.

It is important to note that the views, opinions, and responses expressed in this questionnaire are solely those of the individual participant and do not reflect your organization's official stance or views.

This questionnaire is designed to gather diverse perspectives and insights, and the responses received are meant for research and informational purposes only. Please be assured that your responses will be treated with confidentiality, and the aggregated data will be used for analytical purposes.

We understand that some questions may not apply to your work area, or there might be instances where you are unsure of the answer. In such cases, please feel free to skip that particular question.

We would appreciate receiving the filled questionnaires no later than 11 December 2023. Please send your questionnaires to the email address Dejan.Stojadinovic@gfa-group.de

If you have any concerns or questions regarding the questionnaire or its content, please feel free to contact us. Thank you for your cooperation and valuable contribution.

Name:	
Institution:	
Country / Entity:	
E-mail:	

GRID CODE PROVISIONS FOR vRE INTEGRATION		
1. Do you have a legal obligation to create favourable conditions for high penetration of renewable generation in the electricity grid?	Yes	No
2. If yes, which legal document defines this? (Please provide the title of the law, sub-law or technical regulation)		
3. Do you have legal or regulatory incentives to reinforce the electricity grid to accommodate a large share of renewable generation?	Yes	No
4. If yes, which legal document defines this? (Please provide the title of the law, sub-law or technical regulation)		
5. Are European Network Code Requirements for Generators transposed into the national legislation?	Yes	No
6. If yes, into which legal document? (Please provide the title of the law, sub-law or technical regulation)		
7. Do you have a legal framework - technical requirements for connecting vRE to the transmission grid?	Yes	No
8. If yes, which legal document regulates technical requirements? (Please provide the title of the law, sub-law or technical regulation)		
9. Do you have a legal framework - technical requirements for connecting vRE to the distribution grid?	Yes	No
10. If yes, which legal document regulates technical requirements? (Please provide the title of the law, sub-law or technical regulation)		
11. Is priority dispatching for vRE (wind, solar) available in your country?	Yes	No
12. If yes, which legal document regulates priority dispatching? (Please provide the title of the law, sub-law or technical regulation)		
13. Do you have capacity mechanisms for electricity generation in place?	Yes	No
14. If yes, which legal document regulates capacity mechanisms? (Please provide the title of the law, sub-law or technical regulation)		

GRID CODE PROVISIONS FOR vRE INTEGRATION		
15. Do you have a methodology for national resource adequacy assessment?	Yes	No
16. If yes, which legal document defines methodology i.e. the content of national resource adequacy assessment? (Please provide the title of the law, sub-law or technical regulation)		
17. Do you have TSO and/or DSO rules for procurement of flexibility services from vRE plants?	Yes	No
18. If yes, which legal document regulates rules for procuring flexibility services? (Please provide the title of the law, sub-law or technical regulation)		
19. Do you have a regulatory framework for connecting recharging points for electric vehicles to the distribution grid?	Yes	No
20. If yes, which legal document regulates rules for the connection of recharging points? (Please provide the title of the law, sub-law or technical regulation)		

REGULATIONS AND PROCESSES FOR vRE GRID ACCESS		
1. Do you have a grid connection procedure established for vRE plants that require grid connection?	Yes	No
2. If yes, in which legal document is the procedure published? (Please provide the title of the law, sub-law or technical regulation)		
3. Is this procedure promoted/published on the internet? (Please provide the internet address of the published procedure)		
4. Do you have a grid connection procedure established, for electricity consumers who wish to generate electricity from vRE for self-consumption (prosumer/active customer)?	Yes	No
5. If yes, in which legal document is the procedure published? (Please provide the title of the law, sub-law or technical regulation)		
6. Is this procedure promoted/published on the internet? (Please provide the internet address of the published procedure)		

7. Do you have a simplified grid connection procedure for prosumers/active customers with installed capacity up to 10.8 kW?	Yes	No
8. If yes, which legal document regulates simplified grid connection procedure? (Please provide the title of the law, sub-law or technical regulation)		

RULES FOR PRIVATE SECTOR PARTICIPATION IN vRE EXPANSION (Rights and obligations of vRE investors and operators)		
1. Are there publicly available guidelines for investors for the development of vRE projects?	Yes	No
2. If yes, please provide the internet address of the published guidelines?		
3. Is there a requirement in the development phase to demonstrate the proper simulation of generation output with hourly/sub-hourly data for 2 or more years?	Yes	No
4. If yes, in which legal document is the procedure published? (Please provide the title of the law, sub-law or technical regulation)		
5. Is there an accurate assessment of grid capacity (limits) at different locations within the existing grid including the current status of the electricity grid, HV and MV transmission lines and substations, grid constraints and bottlenecks?	Yes	No
6. Is this assessment publicly available? If yes, please provide the internet address		
7. How is the point of connection for vRE plants defined in the national legislation? <ul style="list-style-type: none"> • output point at the required voltage • meter • substation • medium voltage/high voltage feeding point) • other _____ 		
8. Which legal document defines the point of connection?		
9. How are the costs for grid infrastructure distributed between the vRE investor and the TSO/DSO?		
10. Which legal document regulates the distribution of costs for grid infrastructure between vRE investors and TSO or DSO? (Please provide the title of the law, sub-law or technical regulation)		

11. Information to reveal shortage and surplus of generation capacity can support investors in vRE to identify locations where generation capacity is required (with strong growth of demand). Is this kind of information available to vRE investors, as well as information on existing power generation and committed generation projects for the next 10 - 20 years?	Yes	No
12. If yes, please provide the internet address where information is available		
13. Does the system operator (TSO/DSO) have monitoring/data of real-time production of vRE plants (to plan the operation of dispatchable vRE power)?	Yes	No
14. If yes, which legal document regulates the monitoring of data? (Please provide the title of the law, sub-law or technical regulation)		
15. What type of generation forecasts are operators of vRE plants obliged to provide to system operators (TSO/DSO) and for which period?		
16. Which legal document regulates forecast requirements for vRE? (Please provide the title of the law, sub-law or technical regulation)		
17. Do you have vRE curtailment compensation schemes in place?	Yes	No
18. Is the curtailment framework based on the <ul style="list-style-type: none"> • Discretion of the TSO (curtailment dispatching instruction) • Specified methodology for selecting the units to curtail 		
19. Which legal document(s) define curtailment framework (Please provide the title of the law, sub-law or technical regulation)		
20. Do you have a legal framework for balancing requirements for vRE: <ul style="list-style-type: none"> • For small producers (prosumers/active customers) • For projects that were successful at auctions • For stand-alone projects (PPA/merchant/unsolicited projects) 	Yes Yes Yes	No No No

21. If yes, which legal document regulates balancing requirements for vRE? (Please provide the title of the law, sub-law or technical regulation)
22. Please list existing charges and fees required for grid connection approval (TSO/DSO)?
23. If this information is publicly available, please provide the internet address where the information is published
24. Which legal document regulates the level of these charges and fees? (Please provide the title of the law, sub-law or technical regulation)
25. Are there charges to vRE projects specifically for network reinforcement?
26. If yes, which legal document regulates these charges and fees? (Please provide the title of the law, sub-law or technical regulation)

MARKET DESIGN AND PRICING WITH RESPECT TO vRE		
1. Do you have an organized wholesale market (power exchange): <ul style="list-style-type: none"> • day-ahead market • intraday market 	Yes Yes	No No
2. If yes, which legal document regulates their establishment and functioning? (Please provide the title of the law, sub-law or technical regulation)		
3. Electricity retail tariffs are based on: <ul style="list-style-type: none"> • Average production costs • Marginal production costs • Other _____ 		
4. Do you have an organized balancing market?	Yes	No
5. If yes, what kind of organized balancing market: <ul style="list-style-type: none"> • Capacity and Energy separately • Capacity and Energy bundled 		

6. What kind of pricing is applied at balancing market: <ul style="list-style-type: none"> • Dual imbalance pricing (separate charge per direction upward, and direction downward) • Uniform balancing pricing 		
7. Which legal document regulates their establishment and functioning? (Please provide the title of the law, sub-law or technical regulation)		
8. Do you have market arrangements for <ul style="list-style-type: none"> • Energy storage • Demand response • Flexibility services • Other _____ 	Yes Yes Yes	No No No
9. If yes, which legal document regulates these market arrangements? (Please provide the title of the law, sub-law or technical regulation)		
10. Which institution is the responsible party for market participation: <ul style="list-style-type: none"> • vRE power plant • System operator (TSO/DSO) • Aggregator • Other _____ 		
11. What kind of pricing is applied to determine the price of vRE: <ul style="list-style-type: none"> • PPA with Governmental Entity/TSO – fixed price by law • PPA with Governmental Entity/TSO – variable price by law • PPA with Governmental Entity/TSO – auction price • Merchant/Private or Corporate PPAs • Wholesale spot market participation/ CfD arrangements 		
12. In which phase is rollout of smart meters in your country? <ul style="list-style-type: none"> • No planning • Planning phase • Implementation phase • Operation phase 		
13. Which legal document regulates the rollout of smart meters? (Please provide the title of the law, sub-law or technical regulation)		
14. Is there an appeal/complaint procedure in place, in case of grid connection refusal?	Yes	No
15. If yes, which legal document regulates the appeal/complaint procedure for grid connection refusal? (Please provide the title of the law, sub-law or technical regulation)		

Additional Comments

Please indicate additional **needs for capacity building** in enhancing your expertise in vRE deployment that were not mentioned in this questionnaire.

9. ANNEX II – THE LIST OF PROJECT PARTNERS CONSULTED FOR THE PREPARATION OF THE INVENTORY OF REGULATORY FRAMEWORK CONDITIONS FOR VRE

COUNTRY/ENTITY	Ministries in charge of energy	Grid operators (TSOs)	Grid operators (DSOs)	Regulatory authorities	Electricity Generators	RE Associations
Albania (ALB)	Ministry of Infrastructure and Energy (MIE)	Transmission System Operator (OST)	Electricity Power Distribution System Operator (OSHEE)	Energy Regulatory Authority (ERE)		
Bosnia and Herzegovina – national level (BiH-National)	Ministry of Foreign Trade and Economic Relations (MFTER)	Independent System Operator in Bosnia and Herzegovina (NOS)		State Electricity Regulatory Commission (DERK)		OIE BiH Sarajevo Energy Forum
Bosnia and Herzegovina – entity Republic of Srpska (BiH-RS)	Ministry of Energy and Mining (MEM)	Electricity Transmission / Elektroprenos BiH (EPBIH)	Electric Industry of Republic of Srpska (ERS)	Regulatory Commission for Energy of the Republic of Srpska (REERS)		
Bosnia and Herzegovina – entity Federation of BiH (BiH-FBIH)	Federal Ministry of Energy, Mining and Industry (FMEMI)		Electric Industry of HZHB (EPHZHB)	Regulatory Commission for Energy (FERK)		
			Electric Industry of Bosnia and Herzegovina (EPBIH)			
Kosovo (KOS)	Ministry of Economy (MoE)	Kosovo Electricity Transmission and Market Operator (KOSTT)	Kosovo Electricity Distribution System Operator (KEDS)	Energy Regulatory Office (ERO)		
Montenegro (MNE)	Ministry of Economic Development and Tourism (MEDT)	Montenegro Electricity Transmission Operator (CGES)	Montenegro Electricity Distribution System (CEDIS)	Energy and Water Regulatory Agency of Montenegro (REGAGEN)		
North Macedonia (NMK)	Ministry of Economy (ME)	Macedonian Electricity Transmission and System Operator (MEPSO)	EVN Electricity Distribution (EVN)	North Macedonian Regulatory Commission for Energy and Water Services (ERC)	ELEM	RES Association
Serbia (SRB)	Ministry of Mining and Energy (MME)	Electricity Network of Serbia (EMS)	Electricity Distribution of Serbia (EDS)	Energy Agency of the Republic of Serbia (AERS)		RES Association

Project partners that provided replies to Questionnaire

